need for buffering said data in said receiver" have been removed from the independent claims as unneeded. New claims 12-26 are based on those granted by the EPO (EP 0841 766 B1). New claims 27-38 are similar, focusing on the asynchronous nature of the trigger and the data signal received at the moment needed. New claims 39-40 refer to the framer disclosed at page 4, lines 12-15 and an ATM transmitter based on page 2, lines 28-30.

Regarding the objection to the arrangement of the specification, the specification has been amended above in the same way as the parent application so as to overcome this objection. A "Cross Reference to Related Application" section has also been added to make priority claims to the parent EPA, the US provisional and the US parent of this case.

Regarding the obviousness-type double patenting rejection, a terminal disclaimer is submitted herewith without prejudice. Withdrawal of the obviousness-type double patenting rejection is requested.

Claims 1, 2 and 4-7 are rejected under 35 USC 102(e) as being anticipated by Cioffi (U.S. Pat. No. 5,625,651).

Respectfully, Applicants request reconsideration in view of the clarifying amendments set forth above and the comments which follow.

First, a few words about the present invention. As mentioned at page 1, lines 7-16, in the prior art (including Cioffi), for the receiver to be able to interpret the received data, the received data must be synchronized in the receiver with a reference signal, usually a clock signal in the receiver. Realizing synchronization implies more complexity and therefore there is a need for additional hardware or software in the receiver, the tradeoffs are generally between expense and complexity, on the one hand, and error performance on the other hand. However, some kinds of receivers, e.g., receivers with

a

asymmetric digital subscriber line (ADSL) technology are required to have both a low complexity and also a low error performance.

The object of the invention is to provide a method to synchronize data and a transmitter and a receiver realizing the method of the above-known type, but which are suited for use in communication systems where a low complexity and a low error performance are required at the receiving side.

The basic idea of the invention is to move the complexity of the synchronization process from the receiver to the transmitter, whereby each level of synchronization with the required level of error performance can be realized without making the receiver too complex. The solution according to the present invention, is to generate a trigger signal in the receiver and send it to the transmitter to indicate that the transmitter is then to send data, i.e., at the right time to ensure synchronization between the data received in the receiver and the available signal in the receiver. The advantage is that if such a receiver is an ADSL data frame, the aspects of buffering or idle data insertion are also moved from the receiver side to the transmitter side e.g. from the ADSL side to the ATM side. Therefore, this way of synchronizing is especially suited for systems wherein there is buffering and idle data insertion foreseen anyway. For example, asynchronous transmission mode (ATM) data streams act as a transmitter when transmitting data from ATM cells to ADSL frames (receiver).

Upon receipt of the trigger signals by the transmitter, it sends the data to the receiver at that time or after a predetermined period, at which it is synchronized with the signal available in the receiver.

The Cioffi reference, on the other hand, shows the receiver first absorbing downstream transmissions that inherently contain information concerning a central modem clock (see step 300 of

Fig. 7). From that observation, the remote unit locks its local clock with the central modem clock by means of a phase locked loop (see step 310). After that, a synchronization signal is sent from the remote unit to the central unit (see step 320). In the central, it is then determined (see step 330) the degree of phase shift required in the receiver to synchronize with a frame boundary existing in the central unit, and with which all the remote units must synchronize (see step 330). Once this degree of delay is determined for the particular remote unit, a return synchronization signal is sent from the central unit to the remote unit indicating synchronization or requesting a phase shift to achieve synchronization (see step 340). In other words, both the central unit and the remotes have a high degree of complexity in their circuitry for interchanging this complex scenario of synchronization. For instance, the remotes must have a control and synchronization circuit 80, as shown in Fig. 4, and which includes all of the electronic units shown in Fig. 5, including phase-locked loops, VCOs, variable delay elements, etc.

The present invention takes a different approach, whereby the receiver (see step 1 of claim 1) generates a signal (SIG) in accordance with time moments when data fits into an available time frame in a predetermined place, wherein the signal (SIG) is not a signal with a constant frequency. So, claim 1 makes it clear that the synchronization process is at the convenience of the receiver, and is not synchronized with any observed downstream central modem clock information, as in step 300 of Fig. 7 of Cioffi. Rather, the trigger signal sent from the receiver to the transmitter is indicative that the transmitter is now "allowed" to send data (DAT), as claimed in the third step of claim 1. This means that the transmitter is burdened with the complexity and buffering requirements that such a synchronization scenario implies. Thus, upon receipt of the trigger signal by

the transmitter, the data is sent from the transmitter to the receiver synchronized with the signal (SIG) available in the receiver.

Therefore, Cioffi's synchronization of the remote modem to the central modem by acquisition of the central modem's clock and carrier is not required according to the present invention. Rather, all of the complexity and buffering required by the approach of Cioffi is obviated, according to the present invention, by moving all of this to the transmitter. This allows the objectives of the present invention to be achieved with low complexity at the receiving side of the system.

Withdrawal of the 35 USC 102(e) rejection of claims 1, 4 and 6 is requested.

In regard to claims 2 and 7, they depend from claims 1 and 6, respectively, and all of the comments made above with respect to claims 1 and 6 apply to dependent claims 2 and 7 as well. Withdrawal of the 35 USC 102(e) rejection of claims 2 and 7 is requested.

In regard to claim 5, it depends from claim 4, and all the comments made above with respect to claim 4 apply equally to its dependent claim 5. Withdrawal of the 35 USC 102(e) rejection of claim 5 is requested.

Claims 3 and 8 are rejected under 35 USC 103(a) as being unpatentable over Cioffi (U.S. Pat. No. 5,625,651) in view of Gregg (U.S. Pat. No. 5,003,558). Claims 3 and 8 deal with the situation where the transmitter receives a trigger signal from a receiver, and there is no data available in the transmitter to be sent upon receipt thereof. In that case, claims 3 and 8 both limit their independent claims 1 and 6, respectively, to sending idle data at such times.

The Examiner admits that Cioffi does not disclose the subject matter of claims 3 and 8, but points to Gregg, who shows

the transmission of idle characters when message frames are not being transmitted between two systems that are always in synchronism (see column 1, lines 22-25). The Examiner alleges that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Gregg's idle generator in Cioffi's disclosure to prevent synchronization failure and to improve the telecommunication system.

However, both Cioffi and Gregg show systems that always operate in synchronous mode, i.e., which are locked together by the same sort of complex circuits that the present invention avoids. Therefore, a combination of the idle data teachings of Gregg and the synchronous system of Cioffi would not result in the present invention, which does not involve such continuous synchronism. In other words, a prima facie case has not been made. Moreover, even if the proposed modification to Cioffi did result in the claimed subject matter, the PTO has still not explained why the proposed modification would have been obvious. To satisfy such a step, the Patent Office must identify where the prior art provides the motivating suggestion to make the modification proposed, *In re Jones*, 958 F.2d 347, 21 USPQ 2d 1941 (Fed. Cir. 1992). A motivation of keeping the frame synchronization process functioning properly by transmitting data whenever it is needed is not a motivation in an asynchronous system which does not have such a need. The mere fact that the prior art may be modified as suggested by the Examiner does not make the modification obvious unless the prior art suggests the desirability of the modification, *In re Fritch*, 922 F.2d 1260, 23 USPQ 2d 1780 (Fed. Cir. 1992).

Withdrawal of the 35 USC 103 rejection of claims 3 and 8 is requested.

The prior art made of record and not relied upon is noted, and it is not believed to be material, and it is therefore

believed that the presently-claimed invention is novel and nonobvious thereover.

The Examiner is requested to reconsider in light of the above amendments and the remarks above and to correspondingly issue a Notice of Allowability and Notice of Allowance in favor of pending claims 1-40. However, in case the Examiner holds a different view, an interview with the applicants' undersigned attorney would be helpful and is requested, either in person or by telephone, at the convenience of the Examiner.

Respectfully submitted,

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Version with Markings to Show Changes

The specification has been amended as follows:

At page 1, lines 1-2, the Title has been amended as follows:

--A METHOD TO [SYNCHRONISE] SYNCHRONIZE DATA AND A TRANSMITTER AND A RECEIVER [REALISING] REALIZING SAID METHOD--.

At page 1, the paragraph beginning at line 4 has been rewritten as follows:

--The present invention relates to a method to [synchronise] synchronize data [as described in the preamble of claim 1], and a transmitter and a receiver [realising] realizing said method [as described in the preambles of claim 4 and claim 6].--.

At page 1, the paragraph beginning at line 7 has been rewritten as follows:

--Such a method to [synchronise] synchronize data is common knowledge. Indeed, e.g., in communication systems where data is sent from a transmitter to a receiver, for the receiver to be able to [interprete] interpret the received data, the received data have to be [synchronised] synchronized in the receiver with a reference signal, [usual] usually a clock signal of the receiver. Realizing synchronization implies more complexity and therefore there is a need for additional hardware of software in the receiver. The trade-offs are generally between expense and complexity, on the one hand, and error performance on the other hand. However, some kind of receivers, e.g., receivers using asymmetric digital subscriber line technology are required to have both, a low complexity and also a low error performance.--.

At page 1, the paragraph beginning at line 17 has been rewritten as follows:

--An object of the present invention is to provide a method to [synchronise] synchronize data and a transmitter and a receiver [realising] realizing said method of the above known type but which are suited for use in communication systems where a low complexity and a low error performance are required at the receiving side of the communication system.--.

At page 1, the paragraph beginning at line 25 has been rewritten as follows:

--Indeed, due to the trigger signals generated from the signal available in the receiver and sent to the transmitter, the transmitter is able to send the data to the receiver upon receipt of the trigger signals, i.e., at the right time to ensure [synchronisation] synchronization between the data received in the receiver and the available signal, e.g., a clock signal in the receiver. In this way, the complexity of the [synchronisation] synchronization process is moved from the receiver side to the transmitter side of the communication system and each level of [synchronisation] synchronization can be [realised] realized with the required level of error performance and without making the receiver too complex.--.

At page 2, the paragraph beginning at line 3 has been rewritten as follows:

--Another characteristic feature of the present invention is that the data, sent from the transmitter to the receiver, is asynchronous data. Indeed, upon receipt of the trigger signals, the transmitter must be able to send data even if the trigger signals are sent in an asynchronous way. This is for instance the case when the receiver has to receive the data at a time

moment at which the data has [just to fit] to just fit at a predefined place in a frame. In this way frame [synchronisation] synchronization is achieved.--.

At page 2, the paragraph beginning at line 10 has been rewritten as follows:

--Yet another characteristic feature of the present invention is that in the even that no data is available in the transmitter to be sent upon receipt of the trigger signals, the transmitter is able to generate idle data and to send this idle data to the receiver. In this way, e.g., the frame [synchronisation] synchronization process is not disturbed. [This is described in the method of claim 3 and the transmitter of claim 8.]--.

At page 2, the paragraph beginning at line 16 has been rewritten as follows:

--An important application of the present invention is that the receiver is included in an asymmetric digital subscriber line (ADSL) modem. [This is described in claim 5.] In such a receiver, the received data is framed into an asymmetric digital subscriber line frame and sent over a twisted pair. However in known ADSL modems using the known [synchronisation] synchronization methods, when the modem receives data at a higher frequency than the frequency at which the data is sent, the data has to be buffered before being framed. As already mentioned above, it is important to keep the complexity of a receiver in such a modem low. By using the method of the invention, the [asymetric] asymmetric digital subscriber line modem gets rid of, i.e., avoids, the buffering aspect. In fact, the buffering is again moved from the receiver to the transmitter which now must be able to buffer the data until [he] it receives a trigger

signal of the receiver to have the permission to [sent] send the data to the receiver. Therefore, this way of [synchronising] synchronizing is [expecially] especially suited for systems wherein there is anyway buffering foreseen at the transmitting side, e.g., for Asynchronous Transmission Mode (ATM) systems.--.

At page 3, the paragraph beginning at line 1 has been rewritten as follows:

--The above-mentioned and other objects and features of the invention will become more apparent and the invention itself will be best understood by referring to the following description of an embodiment taken in conjunction with the accompanying sole figure which is a schematic block [scheme] diagram of a [synchronisation] synchronization system including a transmitter and a receiver [realising] realizing the method of the invention.--.

At page 3, the paragraph beginning at line 6 has been rewritten as follows:

--Referring to the figure, the working of the [synchronisation] synchronization system will be described. First, the working of the [synchronisation] synchronization system will be explained by means of a functional description of the blocks shown in the Figure. Based on this description, implementation of the functional blocks will be obvious to [a] any person skilled in the art and will therefore not be described in detail. In addition, the principle working of the [synchronisation] synchronization system will be described in further detail.--.

At page 3, the paragraph beginning at line 13 has been rewritten as follows:

--The [synchronisation] synchronization system includes a transmitter TX and an asymmetric digital subscriber line modem (ADSL modem) ADSL.--.

At page 3, the paragraph beginning at line 20 has been rewritten as follows:

--The buffer BUF is included to buffer the data DAT presented to the transmitter TX. This data DAT can be digital data of any kind, however, for this embodiment the data DAT is asynchronous data, i.e., data [organised] organized following the asynchronous transfer mode (ATM) technique. As mentioned, the buffer BUF buffers the data DAT presented to the transmitter TX. However, it has to be understood that the buffer BUF will only do this when it is [nessary i.e.] necessary, i.e., when the transmitter receives more data DAT [then he] than it is allowed to send.--.

At page 3, the paragraph beginning at line 27 has been rewritten as follows:

--The idle data generating means ID-GEN is included to generate idle data. It has to be remarked that this is provided to enable the use of one of the typical ATM functionalities. Idle data is [send] sent whenever there is no information available at the side of the sender at the moment of transmission. [They allow] This allows a fully asynchronous operation of both sender and receiver.--.

At page 4, the paragraph beginning at line 5 has been rewritten as follows:

--The trigger receiving means T-RX is included to receive trigger signals T coming from the ADSL modem. Upon receipt of such a trigger signal, the data sending means DAT-SEND is [on

his] in turn triggered by the trigger receiving means T-RX and is allowed to send data.--.

At page 4, the paragraph beginning at line 9 has been rewritten as follows:

--The ADSL modem includes besides a receiver RX also the characteristic functional blocks of an ADSL modem. Since the description of the ADSL technology goes beyond the scope of this invention, these functional blocks are not shown in the figure. However, it is worth [to mention] mentioning here that one of the functional clocks of such an ADSL modem is a framer which organizes overhead information and user information, i.e., the incoming data DAT into ADSL frames, i.e., uniformly sized groups of bits used to organize the ADSL data stream.--.

At page 4, the paragraph beginning at line 20 has been rewritten as follows:

--The trigger generating means T-GEN is included to generate trigger signals T from an available signal SIG in the receiver RX. This available signal SIG is generated in accordance with the time moments whenever data DAT is needed to fit into an available ADSL frame in a predetermined place. This signal [S] SIG is not [necessary] necessarily a clock signal. Indeed, looking to the form of an ADSL frame, [not] the whole frame [must be] need not be filled with data DAT, so [by] as a consequence, the signal [S] SIG is not a signal with a constant frequency.--.

At page 4, the paragraph beginning at line 27 has been rewritten as follows:

--It has to be remarked here that the trigger signals T are allowed to be of any kind, e.g., one single bit pulse or a predefined codeword as long as the trigger generating means T-GEN

of the receiver RX and the trigger receiving means T-RX of the transmitter T [are lined up with each other] can recognize the trigger signals T.--.

At page 5, the paragraph beginning at line 4 has been rewritten as follows:

--The transmission medium for sending the trigger signals is in the figure depicted as a separate line to simplify the description of the working of the system. However, these signals can (and usually are) transmitted over the same transmission medium, i.e., a single twisted wire pair, as the data.--.

At page 5, the paragraph beginning at line 8 has been rewritten as follows:

--The principle working of the [synchronisation] synchronization system will be described in the following paragraph.--.

At page 5, the paragraph beginning at line 10 has been rewritten as follows:

--Whenever data DAT is needed to fit in an available ADSL frame [on] in a predetermined place, a trigger signal T is generated from the available signal SIG and transmitted to the transmitter TX. Upon receipt of a trigger signal T the trigger receiving means T-RX gives a signal to the data sending means DAT-SEND, e.g., by means of a [controle] control signal, and DAT-SEND [on his] in turn [requests] makes a signal request for data DAT to the buffer BUF. When there is data DAT available in the buffer BUF, the data DAT is provided to the data sending means DAT-SEND. However, when no data DAT is available in the buffer, the [synchronisation] synchronization process may not be disturbed and the data sending means DAT-SEND requests idle data

to the idle data generating means ID-GEN. The data, either user data or idle data, is sent to the receiver RX and arrives there at the right moment to fit immediately into the ADSL frame [on] in the predetermined place whereby [synchronisation] synchronization is established between the data DAT and the available signal SIG.--.

At page 5, the paragraph beginning at line 23 has been rewritten as follows:

--It has to be remarked that upon receipt of a trigger signal T, the transmitter TX has to send data DAT to the receiver RX. Sending data can be done [immeditely] immediately after receiving of the trigger signal T, however the invention is not restricted to such kind of [synchronisation] synchronization systems but is also applicable for [synchronisation] synchronization systems where the data DAT is only sent after a predetermined period. Indeed, in this particular embodiment, the total period between the moment of generating a particular trigger and the moment of data DAT arriving at the receiver RX to accordingly fit into a [according] predefined ADSL frame must be taken into account at [initialisation] initialization time. It can be necessary to have a predetermined waiting period somewhere in the loop in order to be able to [realise] realize the [synchronisation] synchronization. Since the complexity is moved from the receiver RX to the transmitter TX, this waiting period will also be [realised] realized by the transmitter TX.--.

IN THE ABSTRACT:

At page 9, the paragraphs beginning at line 5 have been rewritten as follows:

--A method to [realise synchronisation] realize synchronization of data (DAT) sent from a transmitter (TX) to the receiver (RX), with a signal (SIG) available in the receiver (RX). The method includes the following steps:

- in the receiver (RX) generating trigger signals (T) from the signal (SIG);
- sending the trigger signals (T) from the receiver (RX) to the transmitter (TX); and
- upon receipt of the trigger signals (T) by the transmitter (TX) sending the data (DAT) from the transmitter (TX) to the receiver (RX).

[(figure)]--.

IN THE CLAIMS:

The claims have been amended as follows:

1. (Twice Amended) A method to [realise synchronisation] realize synchronization [in a receiver (RX),] of data (DAT) sent from a transmitter (TX) to [said] a receiver (RX), with a signal (SIG) available in said receiver (RX), [characterised] characterized in that said method includes the steps of:

[-]in said receiver (RX) generating said signal available in said receiver in accordance with a time moment when data fits into an available time frame in a predetermined place, wherein said signal available in said receiver is not a signal with a constant frequency;

[-]in said receiver (RX) generating a trigger signal[s] (T) from said signal (SIG) available in said receiver;

[-]sending said trigger signal[s] (T) from said receiver (RX) to said transmitter (TX) to indicate that the transmitter is allowed to send said data (DAT); and

[-]upon receipt of said trigger signal[s] (T) by said transmitter (TX) sending said data (DAT) from said transmitter (TX) to said receiver (RX) wherein said data (DAT) is for receipt in said receiver synchronized with said signal (SIG) available in said receiver.

2. (Amended) The method according to claim 1, [characterised] characterized in that said data [(DT)] (DAT) is asynchronous data.

3. (Amended) The method according to claim 1, [characterised] characterized in that [said method further includes] in the event that no data is available in said transmitter (TX) to be sent upon receipt of said trigger

signal[s], said method further includes the step of sending idle data from said transmitter (TX) to said receiver (RX).

4. (Twice Amended) A receiver (RX) for receiving from a transmitter (TX) data (DAT), said data (DAT) [having to be] synchronous with a signal (SIG) available in said receiver (RX), [characterised] characterized in that said receiver (RX) includes:

[-] a trigger [generating means] generator (T-GEN) to generate a trigger signal[s] (T) from said signal (SIG) available in said receiver wherein said signal available in said receiver is indicative of a time moment when data fits into an available time frame in a predetermined place, wherein said signal available in said receiver is not a signal with a constant frequency;

[-] a trigger [sending means] sender (T-SEND) to send said trigger signal[s] (T) from said receiver (RX) to said transmitter (TX); and

a data [receiving means] receiver (DAT-RX) to receive said data (DAT) sent by said transmitter (TX) to said receiver (RX) upon receipt of said trigger signal[s] (T) wherein said data (DAT) is for receipt in said receiver synchronized with said signal (SIG) available in said receiver.

5. (Amended) The receiver (RX) according to claim 4, [characterised] characterized in that said receiver (RX) is included in an asymmetric digital subscriber line modem.

6. (Twice Amended) A transmitter (TX) for transmitting data (DAT) to a receiver (RX), said data (DAT) [having to be] synchronous with a signal (SIG) available in said receiver (RX),

[characterised] characterized in that said transmitter (TX) includes:

[-] a trigger [receiving means] receiver (T-RX) to receive a trigger signal[s] (T)[,] generated by said receiver (RX) from said signal (SIG) available in said receiver and sent from said receiver (RX) to said transmitter (TX) wherein said signal available in said receiver is indicative of a time moment when data fits into an available time frame in a predetermined place, wherein said signal available in said receiver is not a signal with a constant frequency; and

[-] a data [sending means] sender (DAT-SEND) to send data (DAT) from said transmitter (TX) to said receiver (RX) upon receipt of said trigger signal[s] (T) wherein said data (DAT) is for receipt in said receiver synchronized with said signal (SIG) available in said receiver.

7. (Amended) The transmitter (TX) according to claim 6, [characterised] characterized in that said transmitter (TX) includes means to send said data (DAT) in an asynchronous way.

8. (Amended) The transmitter (TX) according to claim 6, [characterised] characterized in that said transmitter (TX) includes an idle data [generating means] generator (ID-GEN) to generate idle data and to send said idle data from said transmitter (TX) to said receiver (RX) in the event that no data (DAT) is available in said transmitter (TX) upon receipt of said trigger signal[s] (T).

Practitioner's Docket No. 902-578-2

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: F. Van Der Putten et al

Application No.: 09/280,435 Group No.: 2631

Filed: March 28, 1999 Examiner: D. Williams

For: A METHOD TO SYNCHRONIZE DATA AND A TRANSMITTER AND A RECEIVER REALIZING SAID METHOD

Assistant Commissioner for Patents
Washington, DC 20231

AMENDMENT TRANSMITTAL

1. Transmitted herewith is an amendment for this application.

STATUS

2. Applicant is

☐ a small entity. A statement:

☐ is attached.

☐ was already filed.

☒ other than a small entity.

CERTIFICATE OF MAILING/TRANSMISSION UNDER 37 C.F.R. §1.8(a)

I hereby certify that this correspondence is, on the date shown below, being:

MAILING

☒ deposited with the United States Postal Service with sufficient postage as first-class mail, in an envelope addressed to the Assistant Commissioner for Patents, Washington, DC 20231.

Date: June 14, 2002

FACSIMILE

☐ transmitted by facsimile to the U.S. Patent and Trademark Office.

Marilyn O'Connell
Signature

Marilyn O'Connell
(type or print name of person certifying)

EXTENSION OF TERM

NOTE: "Extension of Time in Patent Cases (Supplement Amendments) - If a timely and complete response has been filed after a Non-Final Office Action, an extension of time is not required to permit filing and/or entry of an additional amendment after expiration of the shortened statutory period.

If a timely response has been filed after a Final Office Action, an extension of time is required to permit filing and/or entry of a Notice of Appeal or filing and/or entry of an additional amendment after expiration of the shortened statutory period unless the timely-filed response placed the application in condition for allowance. Of course, if a Notice of Appeal has been filed within the shortened statutory period, the period has ceased to run." Notice of December 10, 1985 (1061 O.G. 34-35).

NOTE: See 37 C.F.R. §1.645 for extensions of time in interference proceedings, and 37 C.F.R. §1.550(c) for extensions of time in reexamination proceedings.

3. The proceedings herein are for a patent application and the provisions of 37 C.F.R. §1.136 apply.

(complete (a) or (b), as applicable)

(a) ☒ Applicant petitions for an extension of time under 37 C.F.R. §1.136 (fees: 37 C.F.R. §1.17(a)(1)-(4)) for the total number of months checked below:

Extension (months)	Fee for other than small entity	Fee for small entity
☒ one month	$ 110.00	$ 55.00
☐ two months	$ 400.00	$200.00
☐ three months	$ 920.00	$460.00
☐ four months	$1,440.00	$720.00

Fee: $ 110.00

If an additional extension of time is required, please consider this a petition therefor.

(check and complete the next item, if applicable)

☐ An extension for _____ months has already been secured. The fee paid therefor of $_____ is deducted from the total fee due for the total months of extension now requested.

Extension fee due with this request $_____

OR

(b) ☐ Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition for extension of time.

FEE FOR CLAIMS

4. The fee for claims (37 C.F.R. §1.16(b)-(d)) has been calculated as shown below:

(Col. 1)		(Col. 2)		(Col. 3)	SMALL ENTITY			OTHER THAN A SMALL ENTITY	
CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NO. PREVIOUSLY PAID FOR		PRESENT EXTRA	RATE	ADDIT. FEE	*OR*	RATE	ADDIT. FEE
TOTAL:	40	MINUS	20	= 20		x $9 = $			x $18 = $ 360.00
INDEP:	9	MINUS	3	= 6		x $42 = $			x $84 = $ 504.00
☐ FIRST PRESENTATION OF MULTIPLE DEP. CLAIM						+ $140 = $			+ $280 = $
						TOTAL ADDL. FEE $			TOTAL ADDL. FEE **$ 864.00**

WARNING: "After final rejection or action (§1.113) amendments may be made cancelling claims or complying with any requirement of form which has been made." 37 C.F.R. §1.116(a) (emphasis added).

(complete (c) or (d), as applicable)

(c) ☐ No additional fee for claims is required.

OR

(d) ☒ Total additional fee for claims required is $ 864.00 .

FEE PAYMENT

5. ☒ Attached is a check in the sum of $ 974.00 .
☐ Authorization is hereby made to charge the amount of $_____.
☐ to Deposit Account No. _____.
☐ to Credit card as shown on the attached credit card information authorization form PTO-2038

FEE DEFICIENCY

NOTE: If there is a fee deficiency and there is no authorization to charge an account, additional fees are necessary to cover the additional time consumed in making up the original deficiency. If the maximum six-month period has expired before the deficiency is noted and corrected, the application is held abandoned. In those instances where authorization to charge is included, processing delays are encountered in returning the papers to the PTO Finance Branch in order to apply these charges prior to action on the cases. Authorization to charge the deposit account for any fee deficiency should be checked. See the Notice of April 7, 1986 (1065 O.G. 31-33).

6. ☒ If any additional extension and/or fee is required, charge Account No. 23-0442 .

AND/OR

☒ If any additional fee for claims is required, charge Account No. 23-0442 .

Francis J Maguire

Signature of Practitioner

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